

### **REMARKS**

Reconsideration and allowance in view of the following remarks are respectfully requested.

Claims 11-17 have been canceled. Claims 3, 4, 6, 7 and 9-10 are withdrawn from consideration. Claims 1-10 are pending in this application.

#### ***Drawings***

The Examiner states that Figures 1 and 2 should be designated by a legend such as -- Prior Art -- because only that which is old is illustrated. In response, Applicant herewith submits Replacement Figures 1 and 2 which include a legend of -- Prior Art ---. Withdrawal of the objection to the drawings is respectfully requested.

#### ***Claim Rejections – 35 U.S.C §102***

Claims 1, 2 and 5 stand rejected under 35 U.S.C §102(b) as being anticipated by DeMarco et al. Applicant traverses the rejection for the following reasons.

A. Claim 1 recites, in part, optical reflection means installed on an input optical fiber or an output optical fiber, and optical anti-reflection means installed on the optical fiber opposite to the optical fiber having the optical reflection means installed on. Applicant submits that DeMarco et al. simply fails to disclose or suggest the input optical fiber. DeMarco et al. relates to a high power multiwavelength light source which only includes an output optical fiber, as well known to person having ordinary skill in the art. In contrast, as the present invention relates to an optical amplifier for optical communication, the claimed invention requires not only the output optical fiber, but also the input optical fiber.

Therefore, claim 1 is not anticipated by DeMarco et al. under 35 U.S.C §102(b). Claims 2 and 5, which are dependent on claim 1, are also allowable for the reasons discussed above with respect to claim 1, as well as on their own merits.

**B.** Claims 1, 2 and 8 stand rejected under 35 U.S.C §102(b) as being anticipated by Bachmann et al. Applicant traverses the rejection for the following reasons.

Applicant submits that Bachmann et al. simply fails to disclose or suggest the optical anti-reflection means of claim 1. According to Bachmann et al., a semiconductor optical amplifier incurs laser oscillation by a pair of DBRs mounted in both terminals of a gain medium such that a gain of the semiconductor optical amplifier is maintained constantly regardless of an input signal power through the laser oscillation. As well known to a person having ordinary skill in the art, the DBR is reflective means. Therefore, Bachmann et al. merely discloses the reflection means at both terminals and simply fails to disclose or suggest the optical anti-reflection means installed on the optical fiber opposite to the optical fiber having the optical reflection means installed on, as recited in claim 1.

Therefore, claim 1 and its dependent claims 2 and 8 are not anticipated by Bachmann et al. under 35 U.S.C §102(b).

***Claim Rejections - 35 U.S.C §103***

**A.** Claim 8 stands rejected under 35 U.S.C §103(a) as being unpatentable over DeMarco et al., and further in view of Hecht. Applicant traverses the rejection for the following reasons.

As set forth above, DeMarco et al. neither discloses nor suggests all of the features of claim 1. Applicant submits that Hecht does not supply the above-noted deficiencies of DeMarco et al. Therefore, claim 8, which is dependent on claim 1, is allowable for the reasons discussed above with respect to claim 1, as well on its own merits.

**B.** Claim 5 stands rejected under 35 U.S.C §103(a) as being unpatentable over Bachmann et al., and further in view of Hecht. Applicant traverses the rejection for the following reasons.

As set forth above, Bachmann et al. fails to disclose or suggest all of the features of claim 1. It is submitted that Hecht does not supply the above-noted deficiencies of Bachmann et al. Accordingly, claim 5, which is dependent on claim 1, is also believed allowable.

***Election of Species***

The Examiner is respectfully requested to reconsider and withdraw the election requirement. Both 37 C.F.R. §1.141 and M.P.E.P. §806.04(a) provide that a reasonable number of species may be claimed in one application. It is respectfully submitted that the number of species claimed in the present application does not exceed such a reasonable number, particularly in view of the structural similarity of, and the similar field of search required for, the claimed species. Reconsideration and withdrawal of the election requirement, therefore, are requested. As generic claim 1 is believed allowable, Applicant respectfully request allowance of pending claims 1-10.

**Conclusion**

The prior art made of record and not relied upon is noted.

All objections and rejections having been addressed, it is respectfully submitted that claims 1-10 are now in condition for allowance and a notice to that effect is earnestly solicited. If any issues remain to be resolved, the Examiner is cordially invited to telephone the undersigned attorney at the number listed below.

Respectfully submitted,

MAYER BROWN ROWE & MAW LLP

By: 

Yoon S. Ham

Registration No. 45,307

Direct No. (202) 263-3280

YSH/jr  
Intellectual Property Group  
1909 K Street, N.W.  
Washington, D.C. 20006-1101  
(202) 263-3000 Telephone  
(202) 263-3300 Facsimile

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FIG. 1  
PRIOR ART

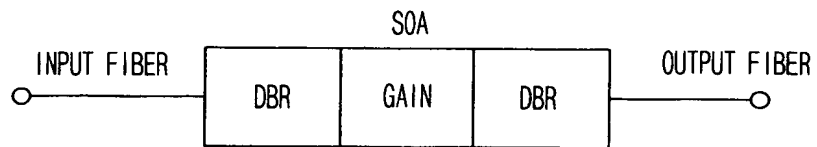


FIG. 2  
PRIOR ART

